

## Subject: Conditional Use Permit No. 757 – Glenn Clausen/Paramount Petroleum

## Background

This application is a request from Paramount Petroleum for a conditional use permit to allow the operation of the Alt-Air Renewable Fuels Project at 14700 Downey Avenue in the M-2 (Heavy Manufacturing) zone. The proposed project is designed to produce renewable jet fuel and renewable diesel fuel from non-edible vegetable oil and high-quality beef tallow. This application is in connection with Zone Variance No. 401, a request to exceed the 85 foot height limit in the M-2 (Heavy Manufacturing) zone, to be heard later this evening by the Planning Commission.

The Alt-Air Renewable Fuels Project is a joint venture between Paramount Petroleum and AltAir Fuels, LLC. AltAir Fuels will be a supplier of renewable fuels to the United States military and commercial airlines. AltAir Fuels has produced, sold, and tested more than one million gallons of renewable fuel from a pilot plant located in Houston, Texas. United Airlines recently entered into a purchase agreement for ten million gallons of renewable jet fuel per year to their LAX terminal from AltAir Fuels.

In July 2013, the Planning Commission approved a conditional use permit for Paramount Petroleum to modify existing rail facilities to allow for the importing of asphalt and crude oil into the refinery via railcar. Under that project, asphalt manufacturing and upgrading capabilities at the refinery did not increase beyond historic levels; the project simply allowed rail facility modifications to allow for the importation of asphalt by rail. Once asphalt is processed at the refinery, it is shipped out via truck. The asphalt project allows up to 25 rail cars to be delivered at one time, with a maximum of 25 empty rail cars leaving at one time. The Alt-Air project will not increase the number of rail cars delivered to the refinery or leaving the refinery at one time.

Paramount Petroleum has operated for more than 70 years. The refinery has historically produced a variety of products including gasoline, jet fuel, diesel fuel, petroleum gases, and liquid sulfur from crude oil. The refinery can produce up to 7,500 barrels per day of reformulated gasoline, and 8,500 barrels per day of ultra-low sulfur diesel. In 2012, due to changes in market demands and other factors, Paramount Petroleum suspended crude refining. While crude refining was suspended, the refinery continues to manage an inventory of finished diesel fuel, to receive fuels for blending, and to produce asphalt products. The refinery also continues to operate as a terminal, which requires the continued use of on-site storage tanks, the use of truck and rail

loading and unloading racks, and the use of pipelines and pipeline connections through pump stations to regional pipeline networks operated by various third parties.

# **Project Description**

The proposed project produces up to 3,500 barrels per day of jet and diesel fuel from non-edible vegetable oils and high-quality beef tallow. Jet and diesel fuels produced from beef tallow and vegetable oils have only 25 to 30 percent of the carbon footprint of crude oil based products. The carbon footprint is the total amount of greenhouse gases (carbon dioxide) produced to support a human activity. The processes to convert tallow and vegetable oil into fuels are similar to existing operations at the refinery, and the proposed project involves modification of certain existing refinery equipment and the installation of new equipment at several locations throughout the refinery site.

The Renewable Fuels Project will use feedstock that will consist of non-edible beef tallow and non-edible vegetable oils. Both beef tallow and vegetable oils are non-toxic, non-hazardous, and have little or no odor. Tallow and vegetable oils will be shipped by rail car (within the 25 rail car delivery limit approved for the asphalt project in July 2013) and truck. Existing rail and truck offloading facilities will be modified to accommodate shipments of beef tallow and vegetable oils, to include offloading pumps and piping. Tallow and vegetable oils would be offloaded into existing storage tanks prior to processing. From the storage tanks, tallow and vegetable oil will move to what is known as "first stage processing". During this phase, trace minerals, such as calcium and magnesium, are removed, and the tallow and vegetable oil are deoxygenated. From here, "second stage processing" is conducted. This process involves isomerization to produce the final product. The final product, diesel fuel and jet fuel, would then be stored in existing tanks on the refinery site in preparation for shipment. Fuel will be shipped by truck and underground pipeline.

The major equipment components of the project and their location within the refinery include the following:

- Modify existing rail unloading facility to include pumps and piping: south-central section of the refinery;
- Modify two existing storage tanks to store beef tallow and vegetable oil: central section and center-east section of the refinery;
- Install new equipment at No. 5 Hydrodesulfurization Unit, to include drums, separator vessels, fractionation towers, and three reactors: center-west section of the refinery; and
- Install a new, 165 foot tall fractionation tower (originally proposed at 168 feet): center-west section of the refinery.

A site map of the refinery showing these major equipment components is attached as Exhibit 2-8.

## Environmental Assessment

Acting as the lead agency, the City of Paramount retained an outside consultant, Blodgett/Baylosis Associates, to conduct the environmental assessment of the AltAir

Renewable Fuels Project. An Initial Study was prepared, and it is recommended that a Negative Declaration be adopted for the project. Below is a summary of the environmental analysis contained in the Initial Study.

## Aesthetics

As discussed above, the project involves modifications and the installation of new equipment to several areas on the refinery site. The largest piece of equipment will be a 165 foot tall fractionator tower that will be installed at the center-west section of the refinery. Existing towers, at various locations throughout the refinery, range in height up to 145 feet. The new fractionation tower will introduce a minor visual change to the skyline of the refinery; however, given its location, at the center-west of the site, and that the new tower would be located in an area that contains several existing towers, the off-site impact would be minimal. The applicant provided a photo simulation, included in the Initial Study attached to this Agenda report, that shows "before" and "after" pictures of the new tower from several locations around the refinery. As indicated in the photo simulations, the new tower will have negligible visibility off-site, and will have only a slight impact to the skyline of the refinery. Additionally, the exterior of the new tower will match the steel exteriors of the existing towers.

The second area of the refinery where new equipment will be installed is at the No. 5 Hydrodesulfurization Unit, located at the center-west section of the refinery. This equipment will include drums, separator vessels, fractionation towers, and reactors. These pieces of equipment vary in size from heights of eight feet to 39 feet, and diameters from one and a half feet to eight feet. Again, these pieces of equipment would be located in the central portion of the refinery, and will not have any off-site visibility. Aside from the fractionator tower described above, other new equipment will be well below the tallest existing refinery pieces and will have no impact on the skyline of the refinery.

### Air Quality

The environmental analysis also evaluated the impact of the project on air quality. Emissions thresholds established by the South Coast Air Quality Management District (SCAQMD) were evaluated for both construction and operational activity. The emissions studied for this environmental analysis include:

- Volatile Organic Compounds (VOC): contributes to ozone formation.
- Carbon Monoxide (CO): a colorless, odorless toxic gas that is produced as exhaust from carbon-containing fuels.
- Nitrogen Oxide (NOx): combustion produced pollutant.
- PM<sub>10</sub> and PM<sub>2.5</sub>: particulate matter less than ten microns and two and one-half microns in diameter, respectively.

The Initial Study found that emissions during construction will not exceed thresholds established by the SCAQMD. Operational emissions were also found to not exceed SCAQMD thresholds. The chart below indicates emission levels from the project operation and SCAQMD thresholds:

Sources	CO (lbs/day)	VOC (Ibs/day)	NOx (lbs/day)	SOx (Ibs/day)	PM10 (lbs/day)	PM2.5 (Ibs/day)
Overall Project Emissions	26.41	45.03	52.76	0.20	32.84	7.79
Significance Thresholds	550	100	55	150	55	55
Significant?	No	No	No	No	No	No

As indicated, the level of pollutant emissions will be less, in some cases considerably less, than standards established by the SCAQMD.

Finally, long-term air quality impacts from exposure to toxics were evaluated as part of the Initial Study. The analysis compared emissions associated with the operation of the proposed project to carcinogenic and non-carcinogenic significance thresholds to determine potential health impacts. The analysis determined that impacts are expected to be less than established thresholds, and that the project will not produce any adverse health impacts. The project meets all SCAQMD guidelines, and as a result, the SCAQMD had no comments on the environmental analysis for the Renewable Fuels Project.

### Green House Gases

Green house gases were also examined as part of the project's Initial Study. The SCAQMD has a threshold of 10,000 metric tons per year of green house gas emissions from industrial sources. The proposed project is expected to produce 1,020 metric tons per year, well below the standard set by the SCAQMD. Based on this analysis, project emissions will not have a negative impact on air quality as it relates to green house gases.

### Hazards and Hazardous Materials

Beef tallow and vegetable oils are not considered hazardous materials. However, hydrogen, which would be utilized as part of the fuel manufacturing process, is considered a flammable material. The proposed project would include daily truck delivery of hydrogen to the refinery. Transportation of hydrogen is regulated by the United States Department of Transportation to prevent risks to the public, and all hydrogen delivery trucks would be required to follow all established safety standards.

Paramount Petroleum utilizes a number of hazardous materials, including hydrogen, at the site to manufacture petroleum products. The major types of public safety risks are impacts from toxic substance releases, fires, and explosions. Paramount Petroleum has an Emergency Response Plan (ERP) in place, and has been very successful in preventing risks to the public and the refinery. Paramount Petroleum operates in a responsible manner that serves to minimize the potential risks associated with the refinery. The facility employs alarms and interlocks to minimize potential unsafe conditions, and the facility undergoes periodic preventive maintenance to reduce the likelihood of catastrophic failures. Additionally, the refinery enforces rules and programs to ensure that employees are following all safety requirements and regulations.

In the case of an emergency, the refinery's ERP provides guidelines for a coordinated emergency management response. In addition to alarm procedures, the refinery has evacuation guidelines, safety and health strategies, and community notification procedures. As part of this project, the refinery would be required to update the facility's ERP to take into consideration the new equipment and modified operations.

### Transportation

As discussed, beef tallow and vegetable oil will be delivered to the refinery by rail and truck. The increase in truck traffic related to this project would be minimal when considering the number truck deliveries that were made when the refinery was in full operation. Between 2009 and 2012 truck traffic to and from the refinery declined by 25.5 percent of historic levels. The truck traffic generated by the Alt-Air project would be more than off-set by the decline in truck traffic since 2009.

Additionally, rail traffic will not increase as a result of this project. As discussed above, the asphalt project approved by the Planning Commission in July 2013 allows a maximum of 25 rail cars to be delivered at one time, and no increase is proposed as part of the Alt-Air project. The same mitigation measures from the asphalt project are part of this project, and include:

- Rail car deliveries are limited to the non-peak hour traffic periods. Prior notification to the City is required for evening, overnight, or early morning deliveries.
- Rail car deliveries are limited to 25 cars at one time.
- Traffic on Downey Avenue may be halted due to a rail car delivery for no than five minutes.
- Refinery and train personnel shall coordinate delivery times so the gate to the rail-loading/unloading area is open prior to the arrival of a train.

### <u>Noise</u>

To address any potential negative impact from noise, the following mitigation measures are required:

- As with the asphalt project approved by the Planning Commission in July 2013, rail car deliveries and pick-ups are permitted between the non-peak traffic hours of 10:00 a.m. and 6:00 p.m. Deliveries outside of these hours require 24-hour notice to Community Development and Public Safety.
- The refinery is required to adhere to the City's noise ordinance.

## Summary

Based on the Initial Study prepared for the project, no significant adverse environmental impacts will be produced by the Alt-Air Renewable Fuels Project. The site is located in a heavy industrial zone, which is an appropriate location for the refinery activities. Additionally, mitigation measures contained in the Mitigation and Monitoring Program

will ensure that surrounding uses and the environment will not be negatively impacted by the project.

#### **Recommended Action**

It is recommended that the Planning Commission read by title only, waive further reading, and adopt Resolution No. PC 13:020 approving Conditional Use Permit No. 757, subject to the following conditions:

- 1. This Conditional Use Permit shall not be effective for any purposes until the owner of the property involved, or his or her duly authorized representative, has filed at the office of the City Planning Commission his or her affidavit stating that he or she is aware of, and accepts all conditions of this exception. The affidavit shall be submitted by Friday, February 14, 2014.
- 2. Except as set forth in conditions, development shall take place substantially as shown on the approved site plans and elevations. The Community Development Director must approve any deviations before construction.
- 3. It is hereby declared to be the intent that if any provision of this Conditional Use Permit is held or declared to be invalid, the exception shall be void and the privileges granted hereunder shall lapse.
- 4. It is further declared and made a condition that this Conditional Use Permit that if any condition hereof is violated or if any law, statute or ordinance is violated, the exception shall be suspended and the privileges granted hereunder shall lapse, provided that the applicant has been given written notice to cease such violation and has failed to do so within thirty (30) days of receipt of said notification.
- 5. The applicant understands that an Unclassified Use Permit, Conditional Use Permit, and/or Variance granted under the Zoning Ordinance, or any section thereof, is granted and accepted by all parties with the express understanding that the Planning Commission may hold a public hearing, notice of time and place of which shall be given to the applicant, if one or more of the following conditions exists:
  - a) That the approval was obtained by fraud;
  - b) That the need for which such approval was granted has ceased to exist or has been suspended for one year or more;
  - c) That the Unclassified Use Permit, Conditional Use Permit, and/or Variance is being, or recently has been, exercised contrary to the terms or conditions of such approval or in violation of any statute, provision of the Code, ordinance, law or regulation;
  - d) That the need for which the approval was granted was so exercised as to be detrimental to the public health or safety or so as to constitute a nuisance (Section 44-170, Paramount Municipal Code).

If after such hearing, the Planning Commission finds that any grounds of revocation exist, the Planning Commission may revoke or suspend such Unclassified Use Permit, Conditional Use Permit, and/or Variance.

- 6. This approval is valid for a period of one year from the date of final determination. If the use approved by this action is not established within such a period of time, this approval shall terminate and shall be null and void.
- 7. The installation of security bars on the exterior windows and doors is prohibited.
- 8. The applicant shall maintain sufficient quantities of matching exterior paint to remove graffiti.
- 9. The use of tarps is prohibited in front setbacks, side setbacks that abut an alley or street, and over driveways.
- 10. The applicant shall obtain all necessary permits from the City of Paramount, the South Coast Air Quality Management District, the Los Angeles County Fire Department, and any other required agency.
- 11. This application is subject to all conditions and mitigation measures contained in the Mitigation and Monitoring Program.

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